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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,710	01/16/2004	Martin W. Rupich	30020-301001 AMSC-676US1	6546
80841	7590	04/27/2011	EXAMINER	
Occhiuti Rohlicek & Tsao LLP 10 Fawcett Street Cambridge, MA 02138			WARTALOWICZ, PAUL A	
			ART UNIT	PAPER NUMBER
			1735	
			NOTIFICATION DATE	DELIVERY MODE
			04/27/2011	ELECTRONIC

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Continuation of 11.

Regarding the amendment being entered, the claim objection of claim 71 has been obviated.

Applicant argues that the statement in Jin that "[t]he possible error in the grain size measurement could be as much as 50%. Also, the ΔM values may be dependent on other factors in addition to the grain size..." demonstrates uncertainty of the cause of Jin's results. Applicant argues that this uncertainty coupled with the conclusion that the improvement is insignificant mean that Jin teaches away from the use of partial rare earth substitution for those looking to obtain a flux pinning enhancement.

However, Jin teaches that there is at least some improvement accomplished by partial substitution of the rare earth element (Table II, pg 78). That there may be an error rate as much as 50% in the measurements indicates to one of ordinary skill that the error rate could be low (i.e. closer to zero). Jin states that the different factors *may* influence flux pinning and thus appear to be speculation on the part of Jin (pg. 78, col. 1). Additionally, Jin states, as quoted by applicant, that the improvements "*may be* viewed as relatively insignificant" (emphasis added, pg. 78, col. 1). This is a subjective conclusion that does not teach away from the invention (i.e. partial substitution of the rare-earth element).

Additionally, Jin does not teach that partial substitution is to be avoided, only that "future efforts should perhaps be concentrated on Ba-, Cu-, or O-site substitutions." This recitation appears to treat rare-earth element substitution as a non-preferred embodiment and not a teaching away as discussed in Office Action mailed 03/31/2010

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at page 2. Jin teaches that there is a measurable increase of the J_c of the superconductor if the rare-earth element is partially substituted (Table II, pg. 78). Therefore, one of ordinary skill in the art at the time applicant's invention was made would combine Riley and Jin as set forth in the Office Action mailed 02/16/2011 at pages 5-13.

/Paul A Wartalowicz/
Examiner, Art Unit 1735

/Jessica L. Ward/
Supervisory Patent Examiner, Art Unit 1735